CLAIMS

I CLAIM:

1. A telephone gateway device for selectively routing telephone calls between a local PSTN and a computer network, the device comprising:

a first telephone port adapted to connect to at least one POTS device;

a second telephone port adapted to connect to a standard telephone jack connected to said PSTN;

a modem adapted to establish a dial-up connection to said computer network;

a network interface device adapted to establish a broadband connection to said computer network;

a CODEC for encoding and decoding voice data relating to said telephone calls;

an internet telephony protocol for controlling internet telephone sessions on said computer network; and

a detection circuit including a microprocessor for detecting an initiation of a toll call on an attached POTS device and selectively routing the toll call to said computer network via either the modem or the network interface.

2. The telephone gateway device in accordance with claim 1, further comprising computer memory.

3. The telephone gateway device in accordance with claim 2, wherein the computer memory is ROM.

4. The telephone gateway device in accordance with claim 3, wherein the computer memory contains a unique identifier of said gateway device.

5. The telephone gateway device in accordance with claim 3, wherein the computer memory further comprises RAM adapted to receive and store information relating to a user of said gateway device.

6. The telephone gateway device in accordance with claim 1, wherein the circuitry is adapted to detect a toll call based upon the dialing of a "1" or "011" on an attached POTS device.

7. The telephone gateway device in accordance with claim 1, wherein the network interface comprises an Ethernet network interface card.

8. The telephone gateway device in accordance with claim 1, further comprising a database of information relating to non-toll area codes relative to an area code of a phone number associated with the at least one POTS device.

9. The device in accordance with claim 1, wherein the CODEC is selected from the group consisting of ITU-T G.711, G.723, G.728, and G.729.

10. The device in accordance with claim 1, wherein the internet telephony protocol is selected from the group consisting of ITU-T H.323, SIP and MGCP.

11. A telephone gateway device for selectively routing telephone calls between a local PSTN and a computer network, comprising:

a first telephone port adapted to connect to at least one POTS device;

a second telephone port adapted to connect to a standard telephone jack connected to said PSTN;

a modem adapted to establish a dial-up connection to said computer network via said PSTN;

a network interface adapted to establish a broadband connection to said computer network;

means for transmitting and receiving voice data over said computer network; and

circuitry adapted to selectively route a toll call initiated on an attached POTS device to said computer network via either the modem or the network interface.

12. The telephone gateway device in accordance with claim 11, further comprising computer memory containing a unique identifier of said gateway device.

13. The telephone gateway device in accordance with claim 12, wherein the computer memory is adapted to receive and store information relating to a user of said gateway device.

14. The telephone gateway device in accordance with claim 11, further comprising a database of information relating to non-toll area codes relative to an area code of a phone number associated with the at least one POTS device.

15. A telephone gateway device for selectively routing telephone calls between a local PSTN and a computer network, comprising:

a first telephone port adapted to connect to at least one POTS device;

a second telephone port adapted to connect said gateway device to said PSTN;

a modem adapted to establish a dial-up connection between said gateway device and said computer network via said PSTN;

a network interface adapted to establish a broadband connection between said gateway device and said computer network;

an internet telephony protocol;

computer memory containing a unique identifier of said gateway device and adapted to receive and store information relating to a user of said gateway device; and

circuitry adapted to detect a toll call placed on an attached POTS device and selectively route the toll call to said computer network via either the modem or the network interface.

16. The telephone gateway device in accordance with claim 15, wherein the circuitry is adapted to detect a toll call based upon the dialing of a "1" or "011" on an attached POTS device.

17. The telephone gateway device in accordance with claim 15, wherein the network interface comprises an Ethernet network interface card.

18. The telephone gateway device in accordance with claim 15, wherein the internet telephony protocol is selected from the group consisting of ITU-T H.323, SIP and MGCP.

19. The telephone gateway device in accordance with claim 15, further comprising a database of information relating to non-toll area codes relative to an area code of a phone number associated with the at least one POTS device.

20. A method of facilitating a telephone connection over a computer network, said telephone connection originating from a POTS device; the method comprising,

receiving information relating to said connection from an ISP;

querying a database of ITSP's based on one or more parameters contained in the information;

selecting an ITSP from a plurality of ITSP's based on the querying; and

transmitting the identity of the selected ITSP to the ISP.

21. The method in accordance with claim 20, wherein the information includes a unique identifier of a telephone gateway device attached to said POTS device.

22. The method in accordance with claim 21, wherein the information further includes an indicator of the geographical location of said POTS device.

23. The method in accordance with claim 22, wherein the indicator is a postal delivery code, a telephone area code, or a telephone country code.

24. The method in accordance with claim 22, wherein the one or more parameters includes the call completion cost.

25. The method in accordance with claim 20, wherein the parameters include one or more of call completion rate, number of lost data packets, voice quality, and network delay.

26. The method in accordance with claim 20, further comprising monitoring a connection between the ISP and the selected ITSP that carries data relating to said telephone connection for lost data packets.

27. A method of selectively routing non-toll and toll telephone calls, comprising:

detecting a phone number dialed on a POTS device;

determining if an area code is present in the phone number;

comparing the area code to a database of information relating to non-toll area codes relative to the area code of the phone number;

connecting to a PSTN for transmitting said non-toll telephone call if the comparing indicates that the area code is a non-toll area code; and

connecting to a computer network for transmitting data relating to said toll telephone call if the comparing indicates that the area code does not correspond to a non-toll area code.